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Remarks

Applicants request continued examination and reconsideration in view of the foregoing amendments and the following remarks.

Section 112, Second Paragraph Rejections

Claims 3, 6 - 7 and 9 are rejected under 35 U.S.C. Section 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the present invention.

Claims 3 and 6 have been amended to more distinctly point out the invention. The support for the amendments of Claims 3 and 6 can be found on page 21, line 25 to page 23, line 23 of the specification. Claim 7 has been cancelled. Claims 8, 9, 10, 11, 12, and 13 have been amended to reflect the cancellation of Claim 7. Claim 9 has been amended to depend from Claim 8.

In view of the above remarks and the amendments, the Applicants believe that the Section 112, second paragraph rejections should be withdrawn.

Section 102(a) Rejection

The Examiner rejected Claims 1 - 6, 14, 16 - 19, and 22 - 28 under 35 U.S.C. Section 102(a) as being anticipated by WO 00/66835 Patent Application under the name Goulet et al. (hereinafter referred to as the "Goulet et al. reference"). The Applicants respectfully traverse this ground for rejection.

The Examiner states that that Goulet et al. reference discloses a process whereby a fiber pulp slurry is transported to a pulp mill dry lap machine and is made into a fibrous web product, dewatering and drying the product and adding a chemical additive.

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The Goulet et al. reference teaches chemically treating a fiber slurry, not a fibrous web. The Goulet et al. reference also teaches dewatering the fiber slurry to remove unadsorbed chemical additive. The Goulet et al. reference discloses "chemically pretreating pulp in a pulp mill before a dry lap machine or crumb baler" (page 6, lines 177 to 178, emphasis added). The Goulet et al. reference does not teach transporting a fiber pulp slurry for treatment of a fibrous web product. Applicants respectfully point out that the Goulet et al. reference does not teach forming a fibrous web which is then treated with a chemical additive and as such, the Goulet et al. reference teaches away from the present invention.

As the Goulet et al. reference does not suggest nor teach the present invention, in that the Goulet et al. reference teaches away from the present invention, the Applicants' claimed invention therefore contains novel elements neither disclosed nor suggested by the Goulet et al. reference. Consequently, the Section 102(a) rejection should be withdrawn.

Section 102(a) or, in the alternative, Section 103(a) Rejection

The Examiner rejected Claims 20 - 21, and 34 under 35 U.S.C. Section 102(a) as being anticipated by the Goulet et al. reference or, in the alternative, under 35 U.S.C. Section 103(a) as being obvious over the Goulet et al. reference. Based upon the cancellation of Claims 20 - 21 and 34, the Section 102(a) or Section 103(a) rejection should be withdrawn.

Double Patenting (Provisional)

Claim 1 has been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being obvious over claims in copending application Serial No. 09/802,529. It is Applicants' intention to submit a terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) for the present application in the event the present application is likely to issue after issuance of the above-referenced copending application and the rejection is maintained.

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Conclusion

Reconsideration of the present application in view of the foregoing amendments and remarks is respectfully requested.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

The undersigned may be reached at: (920) 721-7671.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I, Judy Garot, hereby certify that on January 24, 2002 this document is being transmitted via facsimile to the U.S. Patent and Trademark Office.

By: 

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CLEAN VERSION OF PENDING CLAIMS

- A
1. A method for preparing chemically treated pulp fiber comprising:
 - a) creating a fiber slurry comprising process water and pulp fibers;
 - b) transporting said fiber slurry to a web-forming apparatus of a pulp sheet machine and forming a wet fibrous web;
 - c) drying said wet fibrous web to a predetermined consistency thereby forming a dried fibrous web; and,
 - d) treating said dried fibrous web with a chemical additive thereby forming a chemically treated dried fibrous web containing chemically treated pulp fibers;wherein said chemically treated pulp fibers retain from between about 10 to about 100 percent of applied amount of said chemical additive when said chemically treated pulp fibers are redispersed in water.
 2. The method of Claim 1, further comprising transporting said chemically treated dried fibrous web to a paper machine and mixing said chemically treated dried fibrous web with water to form a chemically treated pulp fiber slurry, wherein said chemically treated pulp fiber slurry containing said chemically treated pulp fibers having said chemical additive retained thereby.
 3. (Amended) The method of Claim 1, wherein said dried chemically treated fibrous web includes a z-direction gradient of said chemical additive.
 4. The method of Claim 1, further comprising dewatering said wet fibrous web thereby forming said dewatered fibrous web.
 5. The method of Claim 4, further comprising drying said dewatered fibrous web thereby forming said dried fibrous web.
 6. (Amended) The method of Claim 5, wherein said chemically treated dewatered fibrous web includes a z-direction gradient of said chemical additive.

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7. Cancelled

8. (Amended) The method of Claim 1 or 2, wherein said chemical additive is selected from the group comprising softening agents, dry strength agents, wet strength agents, opacifying agents, dyes, debonding agents, adsorbency agents, sizing agents, optical brighteners, chemical tracers, and mixtures thereof.

9. The method of Claim 8, wherein said softener is selected from the group consisting of quaternary ammonium compounds, quaternized protein compounds, phospholipids, silicone quaternaries, quaternized, hydrolyzed wheat protein/dimethicone phosphocopolyol copolymer, organoreactive polysiloxanes, polyhydroxy compounds, and silicone glycols.

10. (Amended) The method of Claim 1 or 2, wherein said chemical additive is a softener.

11. (Amended) The method of Claim 1 or 2, wherein said chemical additive is an absorbency agent.

12. (Amended) The method of Claim 1 or 2, wherein said chemical additive is a wet strength agent.

13. (Amended) The method of Claim 1 or 2, wherein said chemical additive is a dry strength agent.

14. The method of Claim 1, further comprising creating a chemically treated pulp fiber slurry by redispersing said chemically treated dried fibrous web in water.

15. The method of Claim 1, wherein said chemical additive is applied to said dried fibrous web in an amount of at least about 0.1 kilograms per metric ton or greater.

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16. The method of Claim 1, wherein said dried fibrous web has a consistency ranging from about 65 percent to about 100 percent.

17. The method of Claim 1, wherein said dried fibrous web has a consistency ranging from about 85 percent to about 95 percent.

18. The method of Claim 1, wherein sufficient residence time is provided after said chemical additive is applied to said dried fibrous web to allow for retention of said chemical additive by said pulp fiber of said dried fibrous web.

19. The method of Claim 1, further comprising forming a paper or tissue product from said chemically treated dried fibrous web.

20. Cancelled

21. Cancelled

22. A method for applying a chemical additive to pulp fiber, said method comprising:

- a) mixing pulp fibers with process water to form a fiber slurry;
- b) transporting said fiber slurry to a web-forming apparatus of a pulp sheet machine and forming a wet fibrous web;
- c) dewatering said wet fibrous web to a predetermined consistency thereby forming a dewatered fibrous web; and,

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d) applying a chemical additive to said dewatered fibrous web thereby forming a chemically treated dewatered fibrous web of chemically treated pulp fibers wherein said chemically treated pulp fibers retain from between about 10 to about 100 percent of applied amount of said chemical additive when said chemically treated pulp fibers are redispersed in water.

23. The method of Claim 22, further comprising transporting said chemically treated dewatered fibrous web to a paper machine and mixing said dried fibrous web with water thereby forming a chemically treated pulp fiber slurry, wherein said chemically treated pulp slurry containing chemically treated pulp fibers having said chemical additive retained thereby.

24. The method of Claim 22, wherein said chemically treated dried fibrous web includes a gradient of said chemical additive.

25. The method of Claim 22, further comprising drying said chemically treated dewatered fibrous web to a predetermined consistency thereby forming a chemically treated dried fibrous web.

26. The method of Claim 25, wherein said chemically treated dewatered fibrous web includes a gradient of said chemical additive.

27. The method of Claim 25, further comprising transporting said chemically treated dried fibrous web to a paper machine and mixing said dried fibrous web with water thereby forming a chemically treated pulp fiber slurry, wherein said chemically treated pulp slurry containing chemically treated pulp fibers having said chemical additive retained thereby.

28. The method of Claim 27, further comprising transporting said chemically treated pulp fiber slurry through said paper machine to form a finished paper or tissue product having enhanced quality due to the retention of said chemical additive by said chemically treated pulp fibers.

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29. The method of Claim 27, wherein the amount of said chemical additive retained by said chemically treated pulp fibers is about 0.1 kilogram per metric ton or greater, and the amount of unretained said chemical additive in said water is between 0 and about 50 percent of the applied amount of said chemical additive retained by said chemically treated dewatered fibrous web when said chemically treated pulp fibers are redispersed in water.

30. The method of Claim 22, wherein the amount of said chemical additive applied to said dewatered fibrous web is about 1 kilograms per metric ton or greater.

31. The method of Claim 22, wherein the amount of said chemical additive applied to said dewatered fibrous web is about 3 kilograms per metric ton or greater.

32. The method of Claim 22, wherein the amount of said chemical additive applied to said dewatered fibrous web is about 5 kilograms per metric ton or greater.

33. The method of Claim 22, wherein said chemical additive is selected from the group comprising softening agents, dry strength agents, wet strength agents, opacifying agents, dyes, debonding agents, absorbency agents, sizing agents, optical brighteners, chemical tracers, and mixtures thereof.

34. Cancelled